

WHAT IS CLAIMED IS:

1. A speech enabled automatic name dialer dialing system for connection
to a telephone system, utilizing a user computer having a computer-
based address book program for retrieval of name-telephone number data
therefrom and for creation therefrom of speech enabling phoneme sets
for auto dialing by speaking a name utilizing telephone application
programming interface, for use with telephones with private branch
exchanges, which comprises:

(a.) at least one user computer having a microphone and a

speaker;

(b.) a telephone application programming interface

provider installed in said user computer;

(c.) memory within said at least one user computer for

storing, managing and supporting name-telephone number data;

(d.) software contained within said user computer, having

at least the following functional capabilities:

(i.) accessing said at name-telephone number data

contained within said at least one user computer;

(ii.) creating converted phonemes from names of said

name-telephone number data;

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(iii.) receiving voice inputs from a microphone connected

to said user computer;

(iv.) matching said phonemes and said voice inputs to

retrieve specific name-telephone number data from said computer-based

name-telephone number data for initiating an automatic dialing thereof;

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and,

(v.) signaling to a router and to a private branch exchange

to initiate a dialing of a telephone number and to effect a telephone call

within a telephone system in response to a voice input/phoneme match.

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2. The dialing system claim 1 wherein said software further includes the

following functional capability:

(vi.) to prompt a user to take a predescribed action if a voice inputted name does not match available name-telephone number data.

5 3. The dialing system of claim 2 wherein said software further includes the following functional capability:

(vii.) to prompt a user to speak a phone number when a voice inputted name does not match available name-telephone number data; and,

10 (viii.) to convert voice inputted telephone numbers into signals for automatic dialing.

4. The dialing system of claim 3 wherein said software further includes the following functional capability:

15 (ix.) to prompt a user to input name-telephone number data to that computer's name-telephone number data; and,

(x.) to return to automatic dialing of the user requested

name after the user has inputted said name-telephone number data.

5. The dialing system of claim 1 wherein said software further includes

5 the following software capability:

(vi.) to prompt a user to make a selection for a telephone

number for a voice inputted name-telephone number match when that

name contains more than one telephone number.

10 6. The dialing system of claim 6 wherein said selection is prompted by

audible choices to be voice inputted by a user, said audible choices

selected from the group consisting of home, office, fax, cell, answering

service, and combinations thereof.

15 7. The dialing system of claim 1 wherein said software includes the

following sequence of use:

(1.) user starts-up dialer program;

(2.) speech engine start-up;

(3.) user speaks activation keyword;

(4.) program queries user for contact name;

5 (5.) if contact name found, if only one number, effects
automatic dialing;

(6.) if contact name found with more than one number,
prompts selection and, after selection is made, effects automatic dialing;

(7.) if contact name not found, dialer does not dial and
10 awaits further input, if number found, effects automatic dialing, if not,
defaults caller.

8. The dialing system of claim 7 wherein the sequence of use also
includes:

15 (8.) if contact name is not found, prompts user to create
new entry of name-telephone number data.

9. The dialing system of claim 9 wherein said new entry is created by manual input through a keyboard.

5 10. The dialing system of claim 9 wherein said new entry is created by voice input.

11. A speech enabled automatic name dialer dialing system for connection to a telephone system, utilizing a user computer having a computer-based address book program for retrieval of name-telephone number data therefrom and for creation therefrom of speech enabling phoneme sets for auto dialing by speaking a name utilizing telephone application programming interface, for use with telephones with private branch exchanges for automatic dialing into a telephone system, which
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15 comprises:

(a.) at least one user computer having a microphone and a speaker;

(b.) a telephone application programming interface provider installed in said user computer;

5 (c.) at least one loaded address book program contained in said at least one user computer;

(d.) an internal network router connected to said at least one user computer for telephone call transmittal via a private branch exchange for dialing through a telephone into a telephone system;

10 (e.) memory within said at least one user computer for storing said at least one loaded address book program, supporting software and name-telephone number data;

(f.) software contained within said user computer, having at least the following functional capabilities:

15 (i.) accessing said at least one loaded address book program contained within said at least one user computer;

(ii.) creating converted phonemes from names of name-
telephone number data;

(iii.) receiving voice inputs from a microphone connected
to said user computer;

5 (iv.) matching said phonemes and said voice inputs to
retrieve specific name-telephone number data from said computer-based
address book program for initiating an automatic dialing thereof; and,

(v.) signaling to a router and to a private branch exchange
to initiate a dialing of a telephone number and to effect a telephone call
10 within a telephone system in response to a voice input/phoneme match.

12. The dialing system claim 11 wherein said software further includes
the following functional capability:

(vi.) to prompt a user to take a predescribed action if a
15 voice inputted name does not match available name-telephone number
data.

13. The dialing system of claim 12 wherein said software further includes the following functional capability:

(vii.) to prompt a user to speak a phone number when a

5 voice inputted name does not match available name-telephone number data; and,

(viii.) to convert voice inputted telephone numbers into signals for automatic dialing.

10 14. The dialing system of claim 13 wherein said software further includes the following functional capability:

(ix.) to prompt a user to input name-telephone number

data to that user's computer address book program; and,

(x.) to return to automatic dialing of the user requested

15 name after the user has inputted said name-telephone number data.

15. The dialing system of claim 11 wherein said software further includes the following software capability:

(vi.) to prompt a user to make a selection for a telephone number for a voice inputted name-telephone number match when that name contains more than one telephone number.

16. The dialing system of claim 15 wherein said selection is prompted by audible choices to be voice inputted by a user, said audible choices selected from the group consisting of home, office, fax, cell, answering service, and combinations thereof.

17. The dialing system of claim 11 wherein said software includes the following sequence of use:

- (1.) user starts-up dialer program;
- (2.) speech engine start-up;
- (3.) user speaks activation keyword;

(4.) program queries user for contact name;

(5.) if contact name found, if only one number, effects
automatic dialing;

(6.) if contact name found with more than one number,
prompts selection and, after selection is made, effects automatic dialing;

(7.) if contact name not found, dialer does not dial and
awaits further input, if number found, effects automatic dialing, if not,
defaults caller.

18. The dialing system of claim 17 wherein the sequence of use also
includes:

(8.) if contact name is not found, prompts user to create
new entry of name-telephone number data.

19. The dialing system of claim 19 wherein said new entry is created by
manual input through a keyboard.

